

## ABSTRACT

An auto-ranging electricity meter circuit having multiple current signal paths. Each of the current signal paths are amplified by a different amount of gain, and then applied to an ADC. The ADC then converts each of the amplified signals at different gains in a continuous process. The system analyzes the different sets of samples to determine which is the most accurate to use. Advantages of an embodiment of the present invention include improved accuracy of an electricity meter using a lower cost A/D converter.